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A new mantis shrimp of the genus *Chorisquilla* Manning, 1969 from French Polynesia (Crustacea: Stomatopoda: Protosquillidae)

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Abstract.—*Chorisquilla similis,* new species, is described from French Polynesia. It most closely resembles *C. quinquelobata* (Gordon, 1935) from Christmas Island, Indian Ocean, but differs chiefly in having the inner proximal margin of the dactylus of the raptorial claw inflated and bearing a prominent, anteriorly directed tubercle; a more elongate median boss of the telson; and the submedian bosses of AS6 separated by a deep fissure instead of a shallow groove.

Examination of French Polynesian stomatopods in the collections of the National Museum of Natural History, Smithsonian Institution, Washington, D.C. (USNM) revealed a specimen of an undescribed species of *Chorisquilla* Manning, 1969. This new species, described below, closely resembles *Chorisquilla quinquelobata* (Gordon, 1935) from Christmas Island, Indian Ocean.

Abbreviations and terminology follows Ahyong (2001). Abbreviations include: total length (TL), carapace length (CL), antennule (A1), antenna (A2), abdominal somite (AS), and thoracic somite (TS).

Protosquillidae Manning, 1980
Chorisquilla Manning, 1969
Chorisquilla similis, new species
Fig. 1

Material examined.—Holotype: female (TL 20 mm), Society Islands, French Polynesia, 17°30′45″S, 149°55′34″W, 9.1–12.2 m, RW89-25, rotenone, R. Winterbottom, 11 Dec 1989, USNM 306086.

Diagnosis.—Raptorial claw dactylus with inner proximal margin convex, inflated, and with anteriorly directed tubercle; propodus without movable proximal spine. AS6 with submedian bosses separated by deep, narrow fissure. Telson with 2 pairs of primary teeth; dorsal surface with 5 strongly inflated longitudinal bosses; surface of all 5 bosses smooth, without setae, tubercles or spines; median boss almost reaching to anterior extent of posterior median emargination; movable apices of primary submedian teeth articulating submarginally; submedian and intermediate denticles absent.

Description.—Eye with cornea broadened, not extending beyond A1 peduncle segment 2. Ocular scales well developed, triangular. Length of A1 peduncle 0.57 CL. Length of A2 scale 0.48 CL; dorsal projection on A2 protopod with acute apex.

Rostral plate with median spine extending anteriorly to base of cornea; basal portion longer than basal width of median spine; lateral spines divergent, straight.

Carapace with anterior margin of each lateral plate concave.

Mandibular palp 2-segmented. Maxillipeds 1–5 with epipod.

Raptorial claw dactylus without basal notch, outer proximal margin strongly inflated; inner proximal margin of dactylus convex, inflated and with anteriorly directed mesial tubercle; propodus without proximal movable spine.

AS1–4 smooth medially, with faint lat-

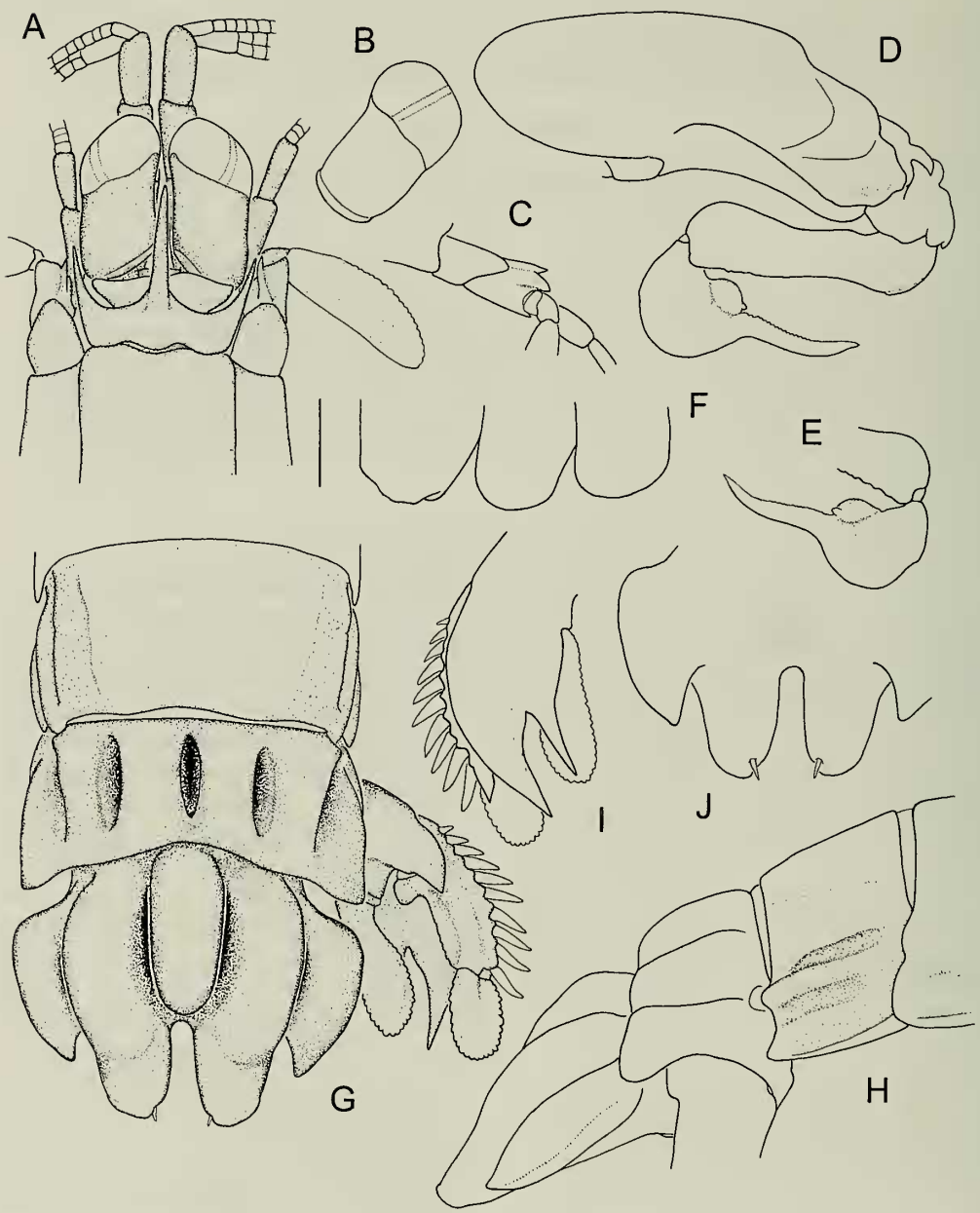

Fig. 1. *Chorisquilla similis,* new species, holotype, female TL 20 mm, USNM 306086. A, anterior cephalon; B, eye, right dorsal; C, antennal protopod, right lateral; D, raptorial claw, right lateral; E, dactylus of raptorial claw, right mesial; F, TS6–8, lower right lateral; G, AS5–6, telson and right uropod; H, AS5–6, telson, right lateral; I, uropod, right ventral; J, telson, ventral. Scale = 1 mm.

eral corrugation above low marginal carina. AS5 smooth medially; corrugated laterally above marginal carina; posterior margin unarmed; with blunt posterolateral projection. AS6 with submedian, intermediate, and lateral bosses fused anteriorly and posteriorly, each smooth, unarmed, demarcated by deep, narrow fissures; posterior margin strongly concave, unarmed.

Telson broader than long; with 2 pairs of

well-defined primary teeth; without submedian or intermediate denticles; dorsal surface with strongly inflated median, submedian, and lateral bosses smooth, unarmed and separated dorsally by deep grooves; median boss elongate, posteriorly reaching almost to anterior extent of posterior median emargination; lateral bosses elongate, shorter than submedian bosses; submedian bosses extending posteriorly beyond anterior extent of median emargination; movable apices of primary submedian teeth articulating submarginally; lateral margins unarmed; ventral surface smooth.

Uropodal protopod terminating in 2 flattened spines, outer longer; protopod unarmed dorsally excepting dorsal spine above proximal exopod articulation. Uropodal exopod proximal segment with 9 or 10 graded movable spines on outer margin, and fixed distal ventral spine; endopod with low dorsal carina, length 2.83 breadth.

Color in alcohol.—Completely faded.

Etymology.—From the Latin *similis,* like, resembling, in reference to the close resemblance to *C. quinquelobata.*

Measurements.—TL 20 mm, CL 4.2 mm, A1 peduncle 2.4 mm, A2 scale 2.0 mm.

Remarks.—*Chorisquilla similis,* new species, closely resembles *C. quinquelobata* from Christmas Island, Indian Ocean, and together differ from all other congeners by the combination of the smooth, strongly inflated telson bosses which are separated dorsally by deep fissures, and the submarginally articulating movable apices of the primary submedian teeth. The new species differs from *C. quinquelobata* in the following features: the inner proximal margin of the dactylus of the raptorial claw is inflated, bearing a distinct mesial tubercle; the propodus of the raptorial claw lacks a proximal movable spine; the outer basal portion of the dactylus of the raptorial claw is deeper and more strongly inflated; the median boss of the telson is distinctly more elongate, almost reaching the anterior margin of the posterior median emargination; the submedian bosses of AS6 are separated by a deep fissure instead of a shallow groove; and the basal portion of the rostral plate is distinctly more elongate than the basal width of the median spine.

Chorisquilla similis and *C. quinquelobata,* together with *C. gyrosa* (Odhner, 1923) further differ from all other described species of the genus by lacking intermediate and submedian denticles on the telson. *Chorisquilla gyrosa* is readily distinguished from *C. similis* and *C. quinquelobata* by the presence of numerous, longitudinal, closely-set dorsal telson carinae, and in having the primary intermediate telson teeth separated from the primary submedian teeth by a shallow notch instead of a deep emargination.

The most unusual feature of *C. similis* is the presence of the inflated convex lobe with the anteriorly directed mesial tubercle on the inner proximal margin of the dactyli of the raptorial claws. No other stomatopod possesses such a feature. In all other protosquillids, the inner margin of the dactylus is smooth or finely serrated, but never inflated or with a small tooth. The presence of small teeth on the inner margin of the dactylus of the smashing claw is diagnostic for the Odontodactylidae Manning, 1980, but should not be confused with the condition of the dactylus in *C. similis.* In odontodactylids, the teeth on the inner margin of the dactylus of the raptorial claw are triangular to spiniform, arise along the midline, and are oblique to the longitudinal axis, whereas in *C. similis,* the tooth is blunt, arises on the mesial margin of the proximal lobe, and is directed parallel to the dactylar axis.

Distribution.—Known only from the type locality, Society Islands, French Polynesia; depth 9.1–12.2 m.

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Literature Cited

Ahyong, S. T. 2001. Revision of the Australian Stomatopod Crustacea.—Records of the Australian Museum, Supplement 26:1–326.

Gordon, I. 1935. On two new species of Crustacea from Christmas Island.—Annals and Magazine of Natural History, series 10, 16:629–637.

Manning, R. B. 1969. Notes on the *Gonodactylus* section of the family Gonodactylidae (Crustacea, Stomatopoda), with descriptions of four new genera and a new species.—Proceedings of the Biological Society of Washington 82:143–166.

———. 1980. The superfamilies, families, and genera of Recent Stomatopod Crustacea, with diagnoses of six new families.—Proceedings of the Biological Society of Washington 93(2):362–372.

Odhner, T. 1923. Indopazifiche Stomatopoden.—Meddelanden från Göteborgs Musei Zoologiska Avdelning 30:1–16, pl. 1.